

May 16, 2008

**Public Notice for Water Quality Certification and/or Waste  
Discharge Requirements (Dredge/Fill Projects)**

Redwood National and State Parks – Elk Creek Culvert Replacement/Aubell Lane  
Widening

WDID No. 1A08036WNDN

Del Norte County

On March 6, 2008, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from Redwood National and State Parks (applicant), requesting Federal Clean Water Act, section 401, Water Quality Certification for activities related to relocation of the Redwood Maintenance Facility including the widening of Aubell Lane to two lanes and the replacement of an existing undersized culvert with a bottomless arch culvert. The proposed project will cause disturbances to waters of the United States associated with an unnamed tributary to Elk Creek in the Smith River Plain Hydrologic Subarea No. 103.11.

Aubell Lane and the proposed project are located off Elk Valley Road, approximately 2 miles east of the Highway 101 and Elk Valley Road intersection. The proposed project includes activities associated with widening Aubell Lane from one lane to two lanes in order to provide a safe access route to a new maintenance facility that will serve national and state park maintenance operations throughout the Redwood National and State Parks.

The new maintenance facility will be constructed on an approximately 13-acre parcel off Aubell Lane in the northern area of Redwood National and State Parks. The new facility will combine the maintenance operations of Redwood National and State Parks into a single facility that is located closer to reliable transportation for increased efficiency and long-term cost effectiveness. The new maintenance facility will replace the existing National Park Service maintenance facility located at Requa which has wastewater disposal issues and is too expensive to maintain due to its age and location in a geologically unstable area. The Requa facility and its associated sewage treatment plant will be removed and the site will be restored.

The proposed project includes activities associated with replacement of an existing twenty-four inch diameter and twenty-four foot long culvert under Aubell Road at an unnamed tributary to Elk Creek. The existing culvert is undersized and a barrier to fish migration. The existing culvert will be replaced with a new eighty four-inch wide and seventy four-foot long multi-plate bottomless arch culvert. The intent of the proposed culvert design is to minimize encroachment into the stream channel and to maintain as much of the natural streambed as possible. The culvert walls extend beyond the banks of the approximately one-foot wide low-flow channel and will encompass the approximately six-foot wide bank full channel. The proposed arch culvert is designed to restore fish passage and accommodate the 100-year storm event and associated bedload. Approximately one quarter mile of fish habitat upstream of the Aubell Lane

crossing will be made available to migrating fish. The road surface above the arch culvert will be shaped with a rolling dip in order to prevent stream diversion should the culvert plug with debris or be overtopped during an extreme runoff event. The existing 300-foot long drainage ditches that parallel each side of Aubell Lane will be filled in order to widen the road to two lanes. These vegetated roadside ditches will be reconstructed on the north edge of the new two-lane road.

Replacement of the existing stream crossing involves removal of the existing road fill and culvert from the stream channel. Fill will be removed by an excavator and will either be hauled by truck or pushed by a dozer to a site where woody debris can be separated from the fill. All existing road fill will be removed from the stream channel and every attempt will be made to uncover and reestablish the original stream channel. Riparian trees and vegetation will be cleared along the sides of the new road prism and downstream of the existing culvert to accommodate the wider road and new arch culvert. Removed native riparian trees with a diameter of 20 inches or greater at breast height will be replanted at a one-to-one ratio in the vicinity of the project. Disturbed areas will also be seeded or planted with native plant species.

If flowing water is present during construction activities, straw bale check dams will be placed approximately 30 feet above and below the culvert replacement activities and the water will be pumped around the disturbed area. The inlet of the pump hose will be screened to prevent the intake of any fish. The hay bale check dams and diversion piping will be removed once culvert and road widening activities are completed.

Approximately fifty cubic yards of soil will be excavated along the streambanks for construction of concrete footings that will support the culvert walls. The footing excavations will extend deeper than the thalweg to prevent potential undercutting of the culvert and road fill. The multi plate arch culvert will be attached to the footings and any excavated fill material that is suitable for reuse will be compacted around the culvert. Appropriately sized gravel will be placed over the concrete footings and the stream bed. Approximately twelve cubic yards of rock riprap will be placed at the inlet and outlet ends to protect the structure and fill against erosion during high flows. Additional fill from the facility construction site will be used as fill for road widening. During construction of the road, a 2.5-inch water pipe and a 1.5-inch sewage pipe leading to a leach field will be laid parallel to Aubell Lane and buried in the road shoulder as it passes over the Elk Creek tributary. A 3-inch HDPE pipe will encase the sewage pipe to protect the creek in case of a pipe break.

Post-construction storm water treatment measures have been incorporated into the drainage plan for the new maintenance facility. Roof downspouts will not be connected to an underground drainage system so that roof runoff will be directed to landscaped areas. The storm water drainage system design incorporates two vegetated drainage swales that will collect and filter storm water runoff from the new buildings and parking areas. Both drainage swales terminate at detention/percolation basins. The down hill edge of each basin will be covered with a geo grid and rock reinforcement layer and will function as a spillway when the basins overflow. The basins have a minimum setback

distance of one hundred feet from the nearest creek and are located in an area that allows for spreading of any water that flows out of the basins for additional overland filtration prior to discharging into the creek.

The proposed new arch culvert and associated riprap will result in approximately 560 square feet (0.01 acre) and 112 linear feet of new permanent impacts to the streambed and banks beyond the area that is occupied by the existing culvert. The proposed check dams and clear water stream diversion will result in approximately 28 square feet (0.0006 acre) and 4 linear feet of temporary impacts to the streambed. Compensatory mitigation is not required for the proposed project. Noncompensatory mitigation includes revegetation of disturbed areas and the use of Best Management Practices for sediment and turbidity control, for use of concrete in a stream channel, and for operation of heavy equipment in a stream channel.

The applicant has obtained authorization (File No. 293040N) from the United States Army Corps of Engineers to perform the project under Nationwide Permit Numbers 3, 14, and 33, pursuant to Clean Water Act, section 404. The Applicant has applied to the California Department of Fish and Game for a Lake or Streambed Alteration Agreement. On September 27, 2007, California Department of Parks and Recreation adopted a mitigated negative declaration (SCH No. 2004122039) for the project in order to comply with CEQA. The Regional Water Board has considered the environmental document and any proposed changes incorporated into the project or required as a condition of approval to avoid significant effects to the environment. The proposed project is scheduled for construction between June 1, 2008 and October 15, 2009.

The information contained in this public notice is only a summary of the applicant's proposed activities. The application for Water Quality Certification in the Regional Water Board's file contains additional details about the proposed project including maps and design drawings. The application and Regional Water Board file are available for public review.

Regional Water Board staff are proposing to regulate this project pursuant to Section 401 of the Clean Water Act (33 USC 1341) and/or Porter-Cologne Water Quality Control Act authority. In addition, staff will consider all comments submitted in writing and received at this office by mail during a 21-day comment period that begins on the first date of issuance of this letter and ends at 5:00 p.m. on the last day of the comment period. If you have any questions, please contact staff member Dean Prat at (707) 576-2801 within 21 days of the posting of this notice.